Update on CARB's Off-Highway Motorcycle (OHMC) Red Sticker Assessment

OHV Commission Meeting September 26, 2014



California Environmental Protection Agency



Recap of May 2 Commission Update

- Overview of the red sticker program
- Off-highway motorcycle (OHMC) population
- Testing objectives
- OHMC test matrix
- OHMC procurement methodology
- Owner survey objectives and development

Section 1: Status of OHMC Procurement

Section 2: Preliminary Emissions Testing Results

Section 3: Status of Owner Survey

Procuring New OHMCs

- Contacted 17 authorized dealers and solicited 14-day rentals of red and green sticker OHMCs
- Two dealers agreed to offer services and ARB procured five new red sticker OHMCs for emissions testing
- Dealer concerns that have hampered procurement:
 - Liability
 - Inventory levels
 - Perception
 - Payment terms



Models of New OHMCs Tested

- New Red Sticker OHMCs
 Procured and Tested
 - 2014 Honda CRF450R
 - 2014 Kawasaki KX450F
 - 2014 Kawasaki KX85
 - 2014 KTM 250SX-F
 - 2014 Suzuki RMZ450



New OHMC Models To Be Tested

New Red and Green Sticker OHMCs Yet to be Procured

for Testing

- Honda CRF150R
- Kawasaki KX250F
- KTM 300XC
- KTM 50SX
- Yamaha YZ450F
- Yamaha YZ250
- Yamaha YZ125
- Honda CRF250X
- KTM 250XCF-W





Procuring In-Use OHMCs

- Mailed rental solicitations in June 2014
- Solicited owners within a 100 mile radius of El Monte, CA
- Offered 60-day rental incentives between \$600 and \$1,500
- Approximately 3,000 rental solicitations were mailed with 63 "interested" responses received

Models of In-Use OHMCs Procured

- In-Use OHMCs Procured
 - 2012 Honda CRF150R*
 - 2011 Honda CRF450R
 - 2013 KTM 300XC
 - 2012 Yamaha WR450F*





^{*} Exhaust testing completed

Overall Test Vehicle Matrix

Vehicle Type	Engine Type	Carburated	Electronic Fuel Injection
New OHMCs	Two-Stroke	2014 Kawasaki KX85	
		KTM 300XC	
		KTM 50SX	
		Yamaha YZ250	
		Yamaha YZ125	
	Four-Stroke	Honda CRF150R	2014 Kawasaki KX450F
		Honda CRF250X	2014 Honda CRF450R
			2014 KTM 250SX-F
			2014 Suzuki RM-Z450
			Kawasaki KX250F
			Yamaha YZ450F
			KTM 250XCF-W
In-use OHMCs	Two-Stroke	2013 KTM 300XC	
	Four-Stroke	2012 Honda CRF150RB	2012 Yamaha WR450F
			2011 Honda CRF450R

Vehicles in **bold font** have been tested and vehicles in regular font are to be tested.

Red color represents Red Sticker OHMCs

Green color represents Green Sticker OHMCs



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Overview of Emissions Testing

- To date, CARB's testing has been limited to exhaust emissions testing
- Purpose of exhaust testing is to compare empirical exhaust data from late model red sticker OHMCs to the standards promulgated in CCR 13, §2412

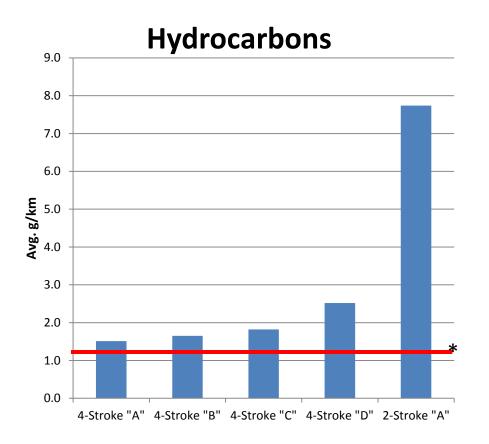
 All testing has been conducted with a chassis dynamometer over the Federal Test Procedure

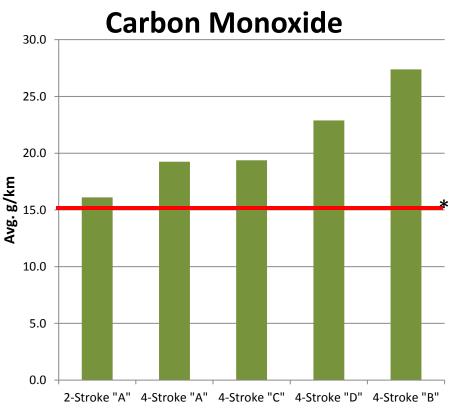


Preliminary Testing Results

- Exhaust Standard Applicable to Green Sticker OHMCs only (CCR 13, §2412 Chassis Based)
 - HC: 1.2 g/km
 - CO: 15.0 g/km
- Preliminary Exhaust Test Results for Five New Red Sticker OHMCs
 - HC (2-Stroke): ~6.4 times higher than the current standard
 - HC (4-Stroke): ~1.3 to ~2.1 times higher than the current standard
 - CO (2-Stroke): ~1.1 times higher than the current standard
 - CO (4-Stroke): ~1.3 to ~1.8 times higher than the current standard

Vehicle-Specific Baseline Testing Results







^{*}Std. pursuant to CCR 13, §2412

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Status of OHMC Owner Survey

- DMV data handling issues caused a delay
- Contract vendor was changed from CSUS to UCD
- Expect to execute a contract within the next three months
- Survey invitations will be co-branded with CA State Parks and CARB logos







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Revised Assessment Timeline

January 2015:

Exhaust testing ends

April 2015:

Update ARB Board on available assessment findings and next steps















November 2014:

Owner survey begins

March 2015:

Workshop to discuss available testing and assessment results

July 2015:

Owner survey ends



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Questions?